Test of "BatMax", the ex-OEM version by Singapore Test Services Pte Ltd.

Element Testing Services (S) Pte Ltd, formerly known as Singapore Test Services (STS), is a pioneer in testing, inspection, calibration, certification, and training services based in Singapore. Founded in 1980, the company operated as a major subsidiary of ST Engineering Land Systems before being acquired by the global testing giant Element Materials Technology Group in August 2022.

The product's performance was successfully tested by the Electrical Laboratory of Singapore Test Services on 2005.10.14.

The results of the Singapore Test Services Pte Ltd. "Standby Time Test" measurements are filed under the report reference number 12284-1105-CMDE6409.

The ex-OEM version of AkkuFresh® foil was tested by the Singapore Test Services Pte Ltd. The battery discharge curves showed that there was an increase in standby time from 20 hours 47 min to about 25 hours 43 min when a battery with our foil technology was used on the Siemens M55 handphone.

Similarly, there was an increase of standby time from 16 hours 28 min to about 22 hours 29 min for the Siemens 357 handphone.

The Singapore Test Services Pte Ltd. testing has clearly proved the effectiveness of the original nanotech battery life foil technology now called AkkuFresh® Next Generation™!

The "BatMax" brand was originally produced in our factory between 2003 and 2005 and sold by World Corporation Services Inc. (director: Alain Aisenberg, Miami, Florida) in the USA. The company was registered in 2004 January 23 in Florida. In 2004, the USA company started to fake our original product. The fake products looked like the original product without the original performance.

In 2005, our manufactory revoked the distribution rights from the US company.

Since 2006 April 18 World Corporation Services Inc., BatMax Corporation, and “BatMax “ as a brand are no longer on the market.

Since November 2006, AkkuFresh® Next Generation™ has been the only original product on the market.

The effect and performance of AkkuFresh® Next Generation™ depend on several factors: Type of device (mobile phone/notebook/camera / etc.), brand, model, type of battery, age, status (total amount of charging-discharging cycles), external temperature, environmental conditions, and cellular network.

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Report Title:	Report No:
Discharge Time Test for BatMax Evaluation	**12284-1105-CMDE6409**
	Page 1 of 6
Client Name:	Client Reference:
Speed One Communications (S) Pte Ltd **8A Mayo Street** **Singapore 208308**	**Order No. : --**
Attention to:	Date:
Mr Cheman Yap	**15 November 2005**

Summary

Two handphones each with a battery were submitted by the client to ascertain if the used batteries' life will be extended with installation of BatMax – a battery life booster.

Measurements were conducted from 10th to 14th October 2005 at the Electrical Laboratory of Singapore Test Services.

All data taken are as shown tabulated inside.

The battery discharge curves showed that there was an increase in standby time from 20 hr 47min to about 25 hr 43 min when battery with BatMax was used on the of the Siemens M55 handphone.

Similarly, there was an increase of standby time from from 16 hr 28 min to about 22 hr 29 min for the Siemens 357 handphone.

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Work carried out by :	Reported by :
Yew Geok Ann	**Chua Meng Choon** *Senior Engineer* **Singapore Test Services**

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1. **INTRODUCTION**

Client supplies a battery life booster known as the BatMax - which is claimed to increase battery stand-by time and talk time. It is designed to regenerate the battery to help it recover its original performance. It also maintains the maximum capacity, reduces the charging time and extends the life span.

A sample, which was already affixed to a used handphone battery, was submitted by client. Please see Figure 1 below for a picture of the BatMax pasted onto a handphone battery.

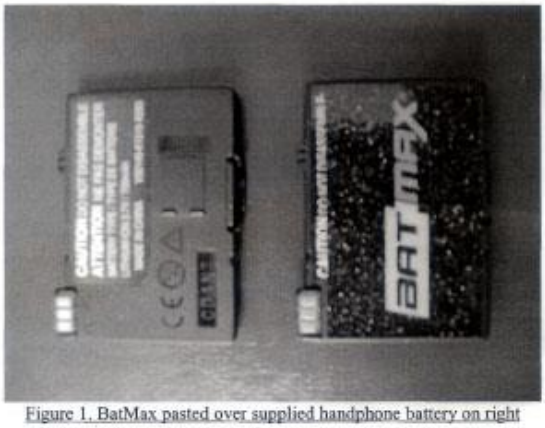

Figure 1. BatMax pasted over supplied handphone battery on right

Tests were conducted from 10th to 14th October 2005 in the Electrical Laboratory of Singapore Test Services to evaluate the BatMax performance.

2. **OBJECTIVE**

The objective of the measurement is to determine the stand-by time of a handphone when it is powered by a used and fully charged battery without BatMax and then with BatMax.

3. **TEST SAMPLES**

The following were supplied by client for the test :

3.1	Siemens Handphone	Model 357	1 pc (S/N S30880-55700-5805-1)
3.2	Siemens Handphone	Model M55	1 pc (S/N S30880-S6320-5803-1)
3.3	Battery		1 pc (with BatMax pasted)
3.4	Battery		1 pc (without BatMax pasted)
3.5	Power Adapter / Charger		1 pc

See Figure 2 for the handphone models supplied.

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Fig. 2 Handphones supplied. (M55 model on left)

4. **EQUIPMENT USED**

The following equipment were used in the conduct of the test.

4.1 Fluke 199C Scope Meter S/No. DM8700077 Calibration Date : 27/09/05

5. **TEST PROCEDURES**

5.1 The instrumentation setup is as shown in Figure 3.

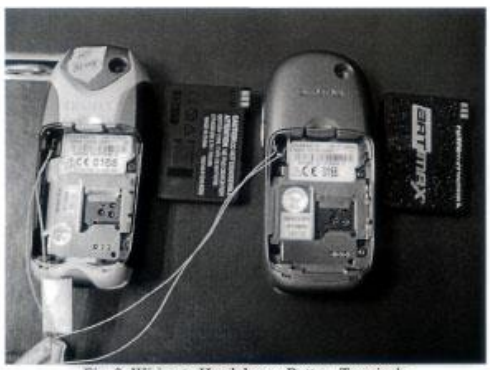

Fig. 3 Wiring to Handphones Battery Terminals

5.1 In order to measure the discharge voltage, thin instrumentation wires are connected to the battery terminals of the handphone.

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5.2 The other end of the wires are then connected to the input of the Scopemeter.

5.3 Prior to start of test, all batteries used are left to discharge as much as possible.

5.4 After that, the batteries in the respective handphone are charged up with the charger to more than an hour one at a time to full charge.

5.5 The test then commences with the turning on of the handphone.

5.6 The handphone has no SIM card inside nor is it set to any alarm mode or power-saving mode to ensure consumption of power with as little variation as possible.

5.7 For each handphone, the discharge time evaluation is first conducted with the battery not pasted with BatMax. Then it is next conducted with the battery with BatMax pasted on it.

5.8 All data are recorded on the Scopemeter set to trend recording mode.

5.9 The data and the ensuing discharge voltage vs time curves are then generated.

6. RESULTS

6.1 Results of all measurements are as shown in Table 1.

Table 1. Discharge Time

Handphone Model	Discharge Time (without BatMax)	Discharge Time (with BatMax)	Difference
357	16 hr 28 min	22 hr 29 min	4 hr 01 min
M55	20 hr 47 min	25 hr 43 min	4 hr 56 min

6.2 The discharge time is taken from turning on of battery to when the handphone powers off (screen blank).

6.2 The discharge voltage vs time curves are generated for each test as shown in Figures 4 to 7.

7. CONCLUSION

The recorded tests showed that there was an increase in standby time from 16 hr 28 min to about 22 hr 29 min when battery with BatMax was used on the of the Siemens 357 handphone.

Similarly, there was an increase of standby time from 20 hr 47min to 25 hr 43 min for the Siemens M55 handphone.

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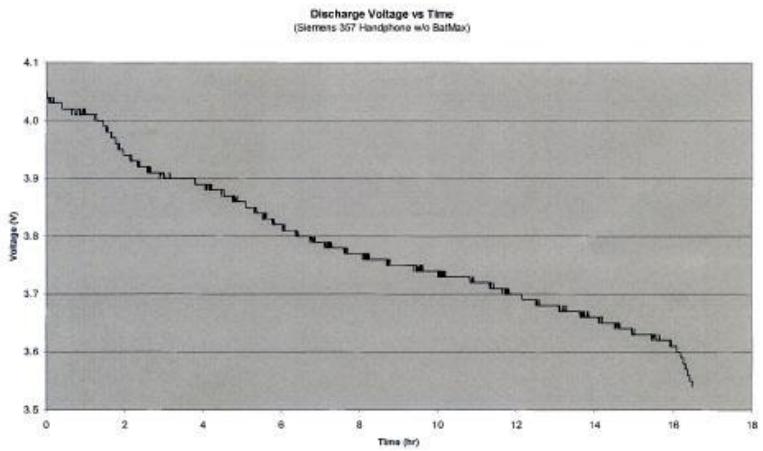

Figure 4. Discharge Voltage vs Time Curve of Siemens 357 Handphone without BatMax.

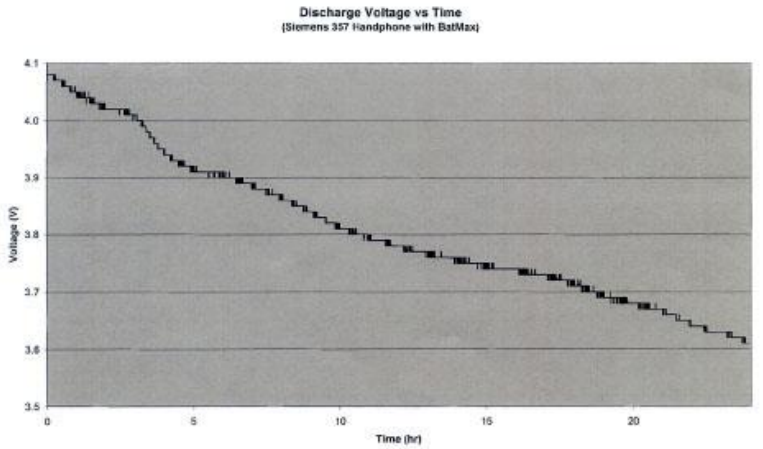

Figure 5. Discharge Voltage vs Time Curve of Siemens 357 Handphone with BatMax.

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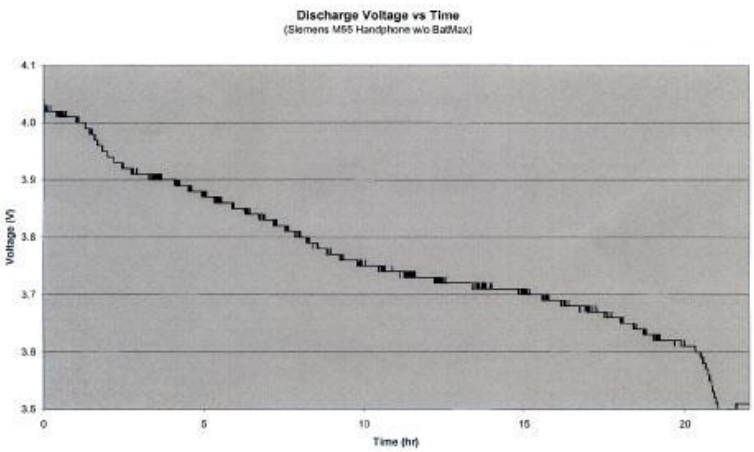

Figure 6. Discharge Voltage vs Time Curve of Siemens M55 Handphone without BatMax.

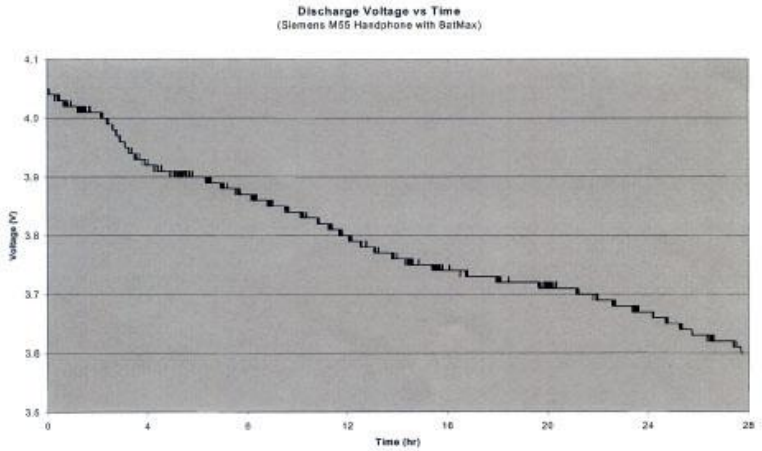

Figure 7. Discharge Voltage vs Time Curve of Siemens M55 Handphone with BatMax.